Annual Water Quality Report

Your Water Quality

Presented by

CITY OF GALLUP

Reporting Year

2012

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Mayor's Message

Citizens of Gallup, once again we proudly present our annual water quality report covering all testing performed between January 1 and December 31, 2012. We have devoted ourselves to produce drinking water that meets all state and federal standards. As your Mayor, the Council and I want to assure you that we make every effort to adopt new methods for delivering the best quality drinking water to you. As new challenges to drinking water safety become known, we remain diligent in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please share with us your thoughts or concerns about the information in this report. After all, well-informed customers are our best allies.

Jackie McKinney
Mayor

Community Participation

Gallup joint Utilities – Water Systems Department encourages you to participate in decisions affecting drinking water. You are invited to attend regular City Council meetings on the second and fourth Tuesday of every month to voice your concerns about your drinking water. City Council meets at 6:00 p.m. at City Hall, 110 West Aztec Avenue, Gallup, New Mexico. Meeting dates and times are published in local newspapers, and agendas may be obtained from the City Clerk's office.

The public is invited to attend and participate in City of Gallup Water Board meetings held the first Tuesday of every month at 3:00 p.m. at the Gallup Joint Utilities Administration office, 230 South Second Street, to discuss current water issues and make recommendations to the City Council.

To find out more about the City of Gallup, visit our Web page at **www.gallupnm.gov**. You may also find information on the U.S. Environmental Protection Agency (U.S. EPA) water information Web site at **http://water.epa.gov/drink/index.cfm**.

Where Does My Water Come From?

Gallup's water is produced from 16 wells tapping underground supplies from two main underground aquifers: the Gallup Sandstone and the Dakota-Westwater. The Dakota-Westwater Aquifer is separated from the Gallup Sandstone by a massive shale layer known as the Mancos Shale. The Gallup Sandstone is the shallower of the two and is several hundred feet thick. The wells are located up to 10 miles from the city center. They range from 300 to 3,500 feet deep. They receive no recharge from surface sources (such as rain or snow) immediately above the well site. Being confined and not being in immediate contact with surface water, these aquifers are well protected from contamination by surface sources in the vicinity of the well sites. Water is collected from these underground supplies then pumped to eight storage tanks. Gravity and pumps move water to our homes and businesses. Many of the water system's components—wells, pipes, storage tanks, and pumps—are old and deteriorating, so a great deal of resources is used to keep water flowing.

Our underground water is being used up. It is not replaced from natural sources. City water shortages in the not-to-distant future are predicted by experts. Our limited and uncertain water supply limits possibilities for growth, economic development, and new jobs. The City has worked to find new sources of water since early in our history. In recent years, water conservation has been recognized as the most cost-effective "source" of water.

A Water Conservation Program is administrated by the Water Conservation Coordinator at the Gallup Joint Utilities. This person administers a number of water-saving programs that have helped replace high-flow toilets, shower heads, clothes washers, and restaurant dishwashing equipment. Another program encourages replacement of private and public lawns and high water-use type landscaping, and use of the rain and snow water for landscaping and gardening. The coordinator also works with schools, businesses, and community groups to make people aware of our water problems and to suggest solutions. The coordinator will inspect businesses and make suggestions for improvements to equipment and landscaping, which will reduce water use and cost. These programs are believed to aid in the water consumption reduction as has lowered the City's cost to pump and distribute water as well as saving water for future use.

Gallup Joint Utilities is using a technology to understand and operate the water system effectively. A computerized control system using sensing equipment and radio communications track continuously the operating conditions at wells, pumps, water tanks, and other equipment, allowing utility personnel to operate the water system efficiently and to identify problems like water line breaks or developing pump problems. A computerized mapping systems is also being developed.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at **(800) 426-4791** or **http://water.epa.gov/drink/hotline**.

Lead in Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at **www.epa.gov/safewater/lead**.

City Rebate Programs

Get Up to $100 Utility Bill Credit for Water Savings

The City of Gallup has fantastic news for water conscious, City of Gallup Joint Utility customers. It is a SMART idea to get rid of your old throne if you believe you're flushing money down the drain using a water-guzzling toilet.

Consider signing up for water saving rebates for all Gallup Joint Utility customers in good account standing who choose to replace old, water-guzzling toilets or clothes washers with new high efficient models that use over 50% less water; install water saving rain barrels; or convert high water using green grass to water thrifty xeriscape landscapes.

After an initial City inspection to see if your toilet or clothes washer, rain barrel or irrigated lawn qualifies for the City of Gallup Rebate programs, sign up for the High-Efficiency (HE) Toilet and Showerhead Rebate program.

Residential customers can get a $100 credit for the first toilet, $75 for a second toilet, and $50 for a third. **Commercial customers** can get a $75 credit on replacing an old water guzzling toilet with a new WaterSense® certified toilet.

Who is eligible for the HE Toilet and Showerhead Rebate?

Gallup Joint Utility customers who have a 3.5 gallons per flush (gpf) water-guzzling toilet in their building, built older than 1994, or a 3 gallons per minute (gpm) guzzling showerhead.

Who is not eligible for the HE Toilet and Showerhead Rebate?

New bathroom additions built 1994 or later or buildings in which toilets have been retrofitted with new 1.6 gallons per flush (gpf) or less toilets.

WaterSense, a partnership program by the U.S. Environmental Protection Agency, seeks to protect the future of our nation's water supply by offering people a simple way to use less water with water-efficient products, new homes, and services. A family of four can save over 16,000 gallons per year and re-pay the new toilet price in two to three years and keep saving. Call **(505) 863-1393** or visit **www.gallupnm.gov/index.aspx?NID=325** to download an application form, to start seeing a decrease in your water and sewer bill, while saving our most precious valuable resource.

Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

Regulated Substances

Substance (Unit of Measure)	Year Sampled	MCL	MCLG	Amount Detected	Range Low–High	Violation	Typical Source
Alpha Emitters (pCi/L)	2012	15	0	6.9	2.9–6.9	No	Erosion of natural deposits
Arsenic (ppb)	2011	10	0	1	1.0–1.0	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Beta/Photon Emitters* (pCi/L)	2011	50	0	7.7	ND–7.7	No	Decay of natural and man-made deposits
Chlorine (ppm)	2011	4	4	2.2	0.24–2.2	No	Water additive used to control microbes
Chromium (ppb)	2011	100	100	<1	0.01–2.0	No	Discharge from steel and pulp mills; erosion of natural deposits
Combined Radium (pCi/L)	2012	5	0	0.98	0.98–1.94	No	Erosion of natural deposits
Fluoride (ppm)	2011	4	4	1.75	0.68–1.75	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids (HAA) (ppb)	2012	60	NA	3.9	ND–13.0	No	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	2012	80	NA	23.7	ND–16.9	No	By-product of drinking water disinfection

Copper and Lead

Tap water samples were collected for lead and copper analyses from sample sites throughout the community.

Substance (Unit of Measure)	Year Sampled	AL	MCLG	Amount Detected (90th %tile)	Sites Above AL	Violation	Typical Source
Copper (ppm)	2012	1.3	1.3	0.11	0	No	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	2012	15	0	0.003	0	No	Corrosion of household plumbing systems; erosion of natural deposits

Secondary Substances

Substance (Unit of Measure)	Year Sampled	MCL	MCLG	Amount Detected	Range Low–High	Violation	Typical Source
Sulfate (ppm)	2004	250	NA	518	518–518	No	Runoff/leaching from natural deposits; industrial wastes

Unregulated Substances

Substance (Unit of Measure)	Year Sampled	Amount Detected	Range Low–High	Typical Source
Bromodichloromethane (ppb)	2012	3	ND–3.0	By-product of drinking water disinfection
Bromoform (ppb)	2012	6.3	0.7–11.4	By-product of drinking water disinfection
Chloroform (ppb)	2012	1.2	ND–1.2	By-product of drinking water disinfection
Dibromochloromethane (ppb)	2012	6.4	0.02–8.3	By-product of drinking water disinfection

*The MCL for beta particles is 4 mrem/year. The U.S. EPA considers 50 pCi/L to be the level of concern for beta particles.

Definitions

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable.

ND (Not Detected): Indicates that the substance was not found by laboratory analysis.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at **(800) 426-4791**.

SMART Toilet Distribution Program

A $335 Value

It is a SMART Idea to get rid of your old throne if you believe you're flushing money down the drain by using a water-guzzling toilet. The City of Gallup has good news. Consider signing-up today to get a high-quality, five-year warrantied, ADA accessible, high-quality water saving toilet for your family. Toilets represent one of the single largest water users inside the home, and account for over a quarter of indoor residential water use. Participating in the SMART Toilet Distribution Program, the City of Gallup will give you—a family of four, in good account standing—a new WaterSense® certified, high-efficiency (HE) toilet, one HE showerhead, and two HE faucet aerators per family—a $335 value. WaterSense toilets have met the U.S. EPA's efficiency and performance requirements, meaning double-flushing and clogging should not be an issue.

It is simple. All you have to do is fill out the application located at **www.gallupnm.gov/index.aspx?NID=325**, call the City of Gallup at **(505) 863-1393** for a pre-inspection, hire a licensed contractor or plumber of your choice to install the new toilet, low-flow showerhead, and faucet aerators for $132. Complete the final inspection, and get a credit on your Gallup Joint Utility bill for a maximum of $132 of actual installation costs. And voilà, you have installed the toilet for free.

Who is eligible?

- City of Gallup customers in good standing who have a water-guzzling toilet in their residence and the residence was built before 1994.
- City of Gallup residential customers with four residents to satisfy water saving requirements. Applicants can submit a copy of last year's income tax form, first page only as proof of their family dependents. The last four numbers of the Social Security information is a sufficient identifier, and income information is not a qualification of this program. Renters must complete the last page of the application called "Owner Consent Form."

Who is not eligible?

- City of Gallup commercial customers and residential customers with less than four residents per household should apply through the City of Gallup Rebate program at **www.gallupnm.gov/index.aspx?NID=325**. For further information call **(505) 863-1393**.
- New bathroom additions built 1994 or later in which they have been retrofitted with 1.6 gallon per flush toilets.
- City of Gallup residential customers replacing an existing 1.6 gallon water-efficient toilet with a new WaterSense efficient toilet.

Navajo Gallup Water Supply Project

Construction of the Navajo Gallup Water Supply Project has begun with the award of a $10.75 million construction contract to build approximately four miles of water supply pipeline north of Gallup to connect a well at Twin Lakes with the water line at Ya-Ta-Hey that delivers most of Gallup's water. The entire project will include construction of two water treatment plants, 280 miles of pipeline, 24 pumping plants, and numerous water regulation and storage facilities. The project will deliver much needed renewable surface water from the San Juan River to 43 Navajo chapters, the City of Gallup, and the Teepee Junction area of the Jicarilla Apache Nation.

The project is very important to Gallup and our neighbors, because ground water levels for our wells have dropped approximately 200 feet over the past 10 years, and over 40 percent of Navajo Nation households rely of hauling water to meet their daily needs. The new and renewable source will provide a dependable and adequate supply of clean water to meet current and future domestic, municipal, and industrial needs.

The project was authorized by the federal Omnibus Public Land Management Act of 2009, which relies on various sources of federal, state and local/city funding. The federal Act requires that all project features are completed no later than December 31, 2024.

Questions?

For more information about this report, or for any questions or comments relating to your drinking water, please call Ernest Thompson, Water/Wastewater Superintendent, at **(505) 863-1207**.